8-Port 10/100Mbps Fast Ethernet Switch with 4 PoE Ports
User's Manual   (625–0581–000)

1. Overview

The Fast switch, an 8 port desktop Fast switch, meets the demand of bandwidth. This desktop switch seamlessly integrates with the rest of the network through its auto-negotiating and non-blocking design. To break through the bottlenecks at the core of network, the switch provides up to 1.6Gbps aggregate bandwidth and seamless migration and the most cost effective method for bringing high-speed networking to the desktop.

PoE allows power to be supplied to end devices, such as Wireless Access Points or VoIP Phones, directly through the existing LAN cables. By supplying the power endpoint, you can centralize power distribution and backup without the need to increase infrastructure. The PSE switch complies with IEEE 802.3af, its advanced auto-sensing algorithm enables providing power devices (PD) discovery, classification, current limit, and other necessary functions. It also supports high safety with short circuit protection and power-out auto-detection to PD.

2. Checklist

Before you start installing the Switch, verify that the package contains the following:

— The 8-Port Fast Switch with 4 PoE

— AC Power Cord

— This User's Manual

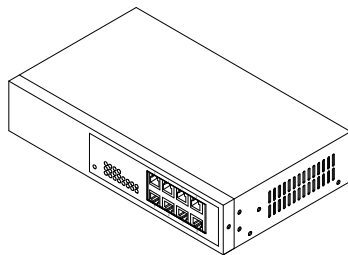Please notify your sales representative immediately if any of the aforementioned items is missing or damaged.

Fig. 1 the 8-Port Fast Switch with 4 PoE

3. Installing the Switch

With the plug and play design, the Fast switch is easy in installation and use. Network and port status can be easily monitored and done trouble-shooting via diagnostic LEDs. Wiring auto crossover on all ports of the switch also allows the connection to server or PC to free from cabling problems.

⇒ In the switch, TP port supports MDI/MDI-X auto-crossover, so both types of cable, straight-through (Cable pin-outs for RJ-45 jack 1, 2, 3, 6 to 1, 2, 3, 6 in 10/100M TP) and crossed-over (Cable pin-outs for RJ-45 jack 1, 2, 3, 6 to 3, 6, 1, 2) can be used. It means you do not have to tell from them, just plug it.

⇒ Use Cat. 5 grade RJ-45 TP cable to connect to a TP port of the switch and the other end is connected to a network-aware device such as a workstation or a server.

⇒ Repeat the above steps, as needed, for each RJ-45 port to be connected to a Fast 10/100 TP device.

⇒ For Fast Ethernet TP network connection
  — The grade of the cable must be Cat. 5 or Cat. 5e with a maximum length of 100 meters.

⇒ Insert the power cord. The embedded internal power unit using different AC power cord is available for different areas.

PSE TP Switch with Powered Device (PD)

⇒ Connect the PSE switch to an AC power source.

⇒ Install the TP media cable to the IEEE 802.3af PD for port 1 to 4. (See Fig. 2)

Note: It can work as a pure switch that connects to non-PoE devices.

⇒ Install the media cable for network connection.
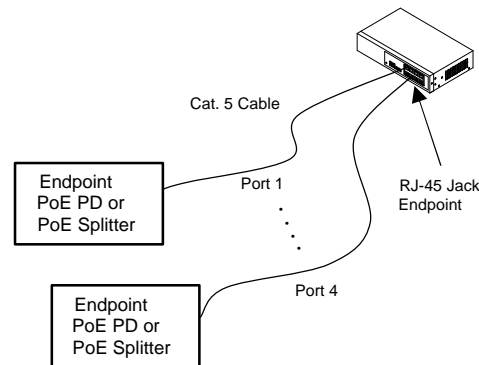
⇒ Port 5 to 8 are pure TP ports for non-PoE devices.

Fig. 2 PSE to PD or PoE Splitter

4. LED Description

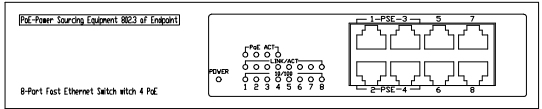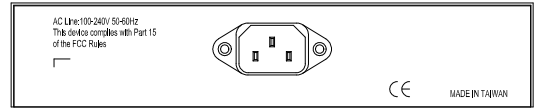| LED	Color	Function
Power	Green	Lit when DC power is coming up
Fast Switch TP Port 1 to 8		
PoE Act (Port 1 to 4)	Green	Lit when PoE feeding power is active
Link/Act	Green	Lit when TP connection is good Blinks when any traffic is present
10/100Mbps	Green	Lit green when 100Mbps speed is active Off when 10Mbps speed is active

Fig. 3 Front View of the 8-Port Fast Switch with 4 PoE

Fig. 4 Rear View of the 8-Port Fast Switch with 4 PoE
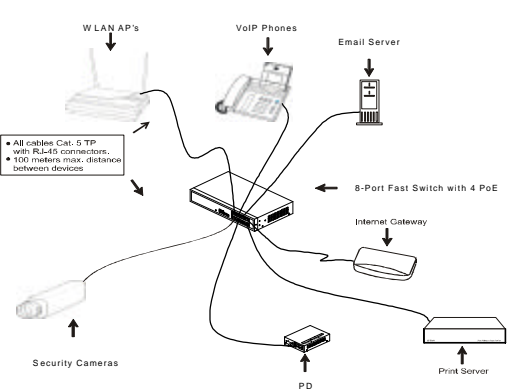
5. Connecting to 10/100Mbps Device and PD

Fig. 5 Network Connection

6. Specifications

- **Standards** : IEEE802.3/802.3u/802.3x
  IEEE802.3af Power over Ethernet
- **Transmission :** 10/100Mbps supports full or half duplex
- **Data Transfer Rate:** PPS (packets per second)

Speed	Forwarding Rate
100Mbps	148,800 PPS
10Mbps	14,880 PPS

- **MAC Address and Self-learning :** up to 1K
- **Buffer Memory :** 96Kbyte on chip frame buffer
- **Flow Control :** IEEE802.3x compliant for full-duplex
  Backpressure flow control for half-duplex
- **Switching Method** : Store & forward
- **Network Interface** : 8 10/100Mbps RJ-45 ports
- **UTP Cable** :

  10BASE-T: UTP Cat. 3, 4, 5 or up
  100BASE-TX: UTP Cat. 5 or up

- **PSE Power Feeding Supports :** (Port 1 to 4)
  "Endpoint" via TP pin 1, 2, 3, 6
- **Diagnostic LEDs** :

  System LED --Power
  PoE LED –PoE Act (Port 1 to 4)
  Per Port LED--Link/Act, 10/100Mbps

- Power Requirement : AC Line
  Voltage : 100-240V
  Frequency : 50-60Hz
  Consumption : Max. 4W (in case no PD device connected) or Max. 65W (with 4 x 15.4W PoE devices connected)

- **Operation Temperature :** 0° to 40°C
- **Operation Humidity** : 10% to 90%
- **Storage Temperature** : 0° to 55°C
- **Humidity** : 5% to 95%
- **Dimensions:** $44(H) \times 220(W) \times 130.5(D)$ mm
- **Complies with FCC Part 15 Class A, CE Mark Approval**

Note: For connecting this device to Router, Bridge, or Switch, please refer to the corresponding device's Technical Manual.